## PATENT ABSTRACTS OF JAPAN

(11)Publication number:

10-106195

(43) Date of publication of application: 24.04.1998

(51)Int.CI.

G11B 21/10 G11B 5/09

(21)Application number: 09-177410

(71)Applicant: INTERNATL BUSINESS MACH CORP

(IBM>

(22)Date of filing:

02.07.1997

(72)Inventor: TIMOTHY CHENER

MARK DEROOMAN SCHULTZ **BACKNER CHAPMAN WEB EDWARD JOHN YARMCHACK** 

(30)Priority

Priority number: 96 677144

Priority date: 09.07.1996

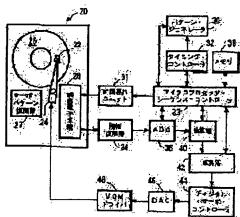
Priority country: US

## (54) METHOD AND SYSTEM FOR ACCURATE SELF-SERVO WRITING IN COMPANY WITH NORMALIZATION OF DISK DRIVE

## (57) Abstract:

PROBLEM TO BE SOLVED: To perform the accurate and timewisely efficient self-servo writing by updating a reference value used for positioning a transporting unit as to a part of track to be written.

SOLUTION: A read back signal from a reading control electronic system 28 is supplied to an amplitude demodulating circuit 34 and digitized by an AD coverter 36 then supplied to a division device 40. The reference value 'f' calculated from the sum of a nominal average reference value and an adjusted value suitable for the present track is sent to the division device 40 from the AD converter 36. In the division device 40, this value is divided by the normalized value, and the resulted propagating burst fractional amplitude is supplied to a subtacter 42 to obtain a positional error signal PES. At this time point, a signal is transmitted to a digital servo controller 44 by a microprocessor sequence controller 33 to read out the signal PES, then a new control voltage is set. Thus, the signal PES is adjusted by an actuator 24 to update the reference value to be used for the positioning operation.



## LEGAL STATUS

[Date of request for examination]

07.12.1999

**BEST AVAILABLE COPY** 

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application

converted registration]

[Date of final disposal for application]

[Patent number]

3532382

[Date of registration]

12.03.2004

[Number of appeal against examiner's decision of

rejection]

[Date of requesting appeal against examiner's

decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office

**BEST AVAILABLE COPY**